Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended)   An image processing device for producing an entire image of a subject by joining a plurality of divided images produced from divided portions defined in said subject and having partially overlapping regions ~~portions~~, comprising:

a setting portion for setting a plurality of sets each including corresponding points in the two divided images having the overlap regions overlapping with each other ~~overlapped together~~;

a transforming portion for performing geometric transformation of one or both of the two divided images based on said plurality of corresponding point sets; and

a joining portion for joining the two divided images based on the plurality of corresponding point sets after the geometric transformation, wherein

said joining portion joins said divided images by placing importance on a specific region where a greater number of said divided images overlap with each other ~~higher importance is placed on a specific portion of said overlapping regions compared with the other in the geometric transformation~~.

2. (Currently Amended)   The image processing device according to claim 1, wherein,

said setting portion sets in said specific region ~~portion~~ the corresponding point sets larger in number than those in another region ~~said other portion~~ for placing importance on said specific region ~~portion~~.

3. (Currently Amended)   The image processing device according to claim 1, wherein,

said transforming portion performs geometric transformation using the transformation parameter obtained by giving high weight to the corresponding point set in said specific region ~~portion~~ for placing importance on said specific region ~~portion~~.

4-8 (Cancelled)

9. (Currently Amended)   An image processing method comprising the steps of:

obtaining a plurality of divided images produced from divided portions defined in a subject and having partially overlapping regions ~~portions~~; and

producing an entire image representing said subject by joining said plurality of produced divided images, wherein

said joining portion joins said divided images by placing importance on a region where a greater number of said divided images overlap with each other ~~the joining of said divided images is performed while placing higher importance on a specific portion among said overlapping regions~~.

10. (Original) The image processing method according to claim 9, wherein

said plurality of divided images include at least first, second, third and fourth divided images arranged in upper right, upper left, lower right and lower left positions, and said four

divided images overlap with each other in a region defined by a central portion of said entire image.

11. (Cancelled)

12. (Original) The image processing method according to claim 9, further comprising the steps of:

setting the plurality of sets of corresponding points corresponding to each other and located in the two divided images having the overlap regions overlapping with each other; and

performing geometric transformation on one or both of said two divided images based on said plurality of corresponding point sets, wherein

said two divided images are joined together after said geometric transformation.

13. (Currently Amended)   An image processing method comprising the steps of:

obtaining a plurality of divided images produced from divided portions defined in a subject and having partially overlapping regions portions;

detecting a direction of positional shift between the two divided images having the overlap regions overlapping with each other;

setting a plurality of sets each including corresponding points in said two divided images based on the detected positional shift direction; and

joining said two divided images based on the set corresponding point sets, wherein

said corresponding points are set based on one of the two divided images located further remotely from a region where at least three partial images including the other of the two divided images overlap with each other.

14. (Original) The image processing method according to claim 13, wherein

characteristic points corresponding to each other and located in the overlap regions of the divided images are detected based on the detected positional shift direction, and the detected characteristic points are set as the corresponding point set.

15. (Original) The image processing method according to claim 14, wherein

the characteristic point is detected in the overlap region of one of said two divided images, a point corresponding to the detected characteristic point is detected in the overlap region of the other divided image, and a set of said characteristic points is set as the corresponding point set.

16. (Original) The image processing device according to claim 14, wherein,

the characteristic points are detected in the overlap regions of said two divided images, respectively, and a set of the characteristics points corresponding to each other is set as the corresponding point set.

17. (Currently Amended)   [[An]] A computer readable medium bearing an image processing program, the program, when executed, causing a computer to execute the steps of:

obtaining a plurality of divided images produced from divided portions defined in a subject and having partially overlapping <u>regions</u> ~~portions~~; and

producing an entire image representing said subject by joining said plurality of produced divided images, wherein

<u>said joining portion joins said divided images by placing importance on a region where greater number of said divided images overlap with each other</u> ~~the joining of said divided images is performed while placing higher importance on a specific portion among said overlapping regions~~.

18. (Currently Amended)   [[An]] <u>A computer readable medium bearing an</u> image processing program<u>, the program, when executed,</u> causing a computer to execute the steps of:

obtaining a plurality of divided images produced from divided portions defined in a subject and having partially overlapping <u>regions</u> ~~portions~~;

detecting a direction of positional shift between the two divided images having the overlap regions overlapping with each other;

setting a plurality of sets each including corresponding points in said two divided images based on the detected positional shift direction; and

joining said two divided images based on the set corresponding point sets<u>, wherein</u>

<u>said corresponding points are set based on one of the two divided images located further remotely from a region where at least three partial images including the other of the two divided images overlap with each other.</u>

19. (New)   An image processing device for producing an entire image of a subject by joining a plurality of divided images produced from divided portions defined in said subject and having partially overlapping regions, comprising:

a setting portion for setting a plurality of sets each including corresponding points in the two divided images having the overlap regions overlapping with each other;

a transforming portion for performing geometric transformation of one or both of the two divided images based on said plurality of corresponding point sets; and

a joining portion for joining the two divided images based on the plurality of corresponding point sets after the geometric transformation, wherein

said joining portion joins said divided images by placing importance on a region near the center of a joined image formed by joining all of said divided images.

20. (New)   An image processing device comprising:

an image obtaining portion for obtaining a plurality of divided images produced from divided portions defined in a subject and having partially overlapping regions;

a detecting portion for detecting a direction of positional shift between the two divided images having the overlap regions overlapping with each other;

a setting portion for setting a plurality of sets each including corresponding points in said two divided images based on the detected positional shift direction; and

a joining portion for joining said two divided images based on the set corresponding point sets, wherein

said corresponding points are set based on one of the two divided images located further

remotely from a region where at least three partial images including the other of the two divided

images overlap with each other.

21. (New)   The image processing device according to claim 19, wherein

the corresponding points set by said setting portion include corresponding points

separated from each other by a prescribed distance.

22. (New)   The image processing method according to claim 13, wherein

the corresponding points set by said setting portion include corresponding points

separated from each other by a prescribed distance.